

[METHOD OF FABRICATING A FLASH MEMORY]

Abstract

A method of fabricating a flash memory is provided. A substrate having several device isolation structures for defining an active region is provided. A tunneling dielectric layer and a patterned mask layer are sequentially formed over the active region of the substrate. A sacrificial layer is formed on the substrates. Thereafter, the sacrificial layer is patterned to retain a part of sacrificial layer on the device isolation structures. The patterned mask layer is removed, and a conductive layer that exposed the top section of the sacrificial layers is formed over the substrate. After removing the sacrificial layer, an inter-gate dielectric layer is formed over the substrate. A control gate is formed over the inter-gate dielectric layer. Finally, a source region and a drain region are formed in the substrate on each side of the control gate.